Message

From: Langman, Michael [langman.michael@epa.gov]
Sent: 3/15/2019 8:03:55 PM
To: Logan, Doug [DLogan@idem.IN.gov]
CC: Danesh, Paymon [Danesh.Paymon@epa.gov]
Subject: RE: T147-39554-00065 Riverview Energy edit to responses

Hi Doug,

Thanks for sending me the updated response.

Can you clarify how EU-3001 and EU-3002's SO2 emission limits were calculated? Draft permit condition D.4.1(e) limits each TGTU to 26.30 lb/hr SO2, each. Draft TSD Appendix A pages 19-21 appears to show that the maximum SRU emission limitation is based on the exhaust molar flow rate (dry) at 70% of VCC capacity (i.e., 41.01 lb-mol/min). With respect to the response for modeling comment #6, does this mean that the modeled emission rate for EU-3001 and EU-3002 is 70% of the SO2 emission rate calculated at 70% of VCC capacity?

The other revisions to the ATSD don't appear to substantially change the responses. Similarly, the revision to the H2S emission rate in the modeling report wouldn't change what's required in the air quality analysis. With the exception of the above, I don't have any further comments on the rest of EPA's portion of the ATSD or the revised modeling report.

Hope you have a good weekend. We can talk about this more next week.

Thanks,
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From: Logan, Doug <DLogan@idem.IN.gov>
Sent: Friday, March 15, 2019 7:13 AM
To: Langman, Michael <langman.michael@epa.gov>
Subject: T147-39554-00065 Riverview Energy edit to responses

Good morning,

When we talked a few days ago, I think I mentioned that the modeling section had sent me some edits to the responses they provided.

It turns out that much of what they sent me last week was simply edits to the language, with no substantive changes. At any rate, the attached file "response edits 3-12" shows the changes in highlighted bold and strikethrough text.

The modeling group also decided to edit the significant emission rates table in the air quality analysis, changing the source emission rate entry for hydrogen sulfide to 5.11 tons/yr. This is the bottlenecked potential to emit at the BACT limit of 10 ppmv. This change does not affect any of the modeling results because the hydrogen sulfide emission rate remains below the significant emission rate of 10 tpy that would trigger modeling. This edit is shown in the attached clip from the air quality analysis, "appC clip 3-14-19"

We have also talked over your concern about the sulfur recovery unit capacities and modeling. We feel that the calculations and air quality analysis describe the capacities and modeled scenarios thoroughly. From our point of view, it is inappropriate to add a limit in the permit when the limit is the physical capacity of the equipment. We are clarifying the unit description, as follows:

(e) Sulfur recovery operations, identified as Block 3000, **with a maximum design capacity of 218 long tons per day (LTD) and a bottlenecked capacity of 156 LTD,** consisting of:

(1) ...

(3) Sulfur Recovery System, consisting of:

(A) One (1) sulfur recovery unit, identified as Sulfur Recovery Unit A, approved in 2019 for construction, **with a maximum design capacity of 109 LTD,** with emergency and pressure relief streams vented to the Block 4000 sulfur flare.

(i) ...
(v) One (1) sulfur product pit, identified as Sulfur Product Pit A, with a maximum throughput capacity of ~~44,611 tons of sulfur per year (70% of VCC capacity) and a nominal capacity 31,865 tons per year (50% of VCC capacity)~~ **109 LTD**, discharging purge air to the TGTU incinerator and molten sulfur to Block 4000.
(vi) ...

(B) One (1) sulfur recovery unit, identified as Sulfur Recovery Unit B, approved in 2019 for construction, **with a maximum design capacity of 109 LTD,** with emergency and pressure relief streams vented to the Block 4000 sulfur flare.

(i) ...
(v) One (1) sulfur product pit, identified as Sulfur Product Pit B, with a maximum throughput capacity of ~~44,611 tons of sulfur per year (70% of VCC capacity) and a nominal capacity 31,865 tons per year (50% of VCC capacity)~~ **109 LTD**, discharging purge air to the TGTU incinerator and molten sulfur to Block 4000.
(vi) ...

You will see also that the sulfur recovery capacity is now expressed in long tons per day. That is because some requirements in 40 CFR 60, Subpart Ja are expressed with thresholds in LTD.

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